

IN THE DRAWINGS:

1. Attached hereto is Replacement Sheet for FIG. 4 that is labeled "Prior Art" and "Replacement Sheet" in response to the objection made to FIG. 4 as filed.

## **REMARKS**

The Office Action mailed August 23, 2005 objected to FIG. 3, FIG. 4, and FIG. 10 and to the specification at various locations. Applicants herewith submit a Replacement Sheet for FIG. 4, amend the specification to overcome objections to FIG. 3, FIG. 10, and amend the specification to overcome the objects to the specification.

The Office Action rejected claims 1 and 14 under 35 U.S.C. 102(b) as being anticipated by Pukkila (US 20010017904 A1). The Office Action rejected claims 1-3, 5, 8-16, 21-27, 30-32, and 34 under 35 U.S.C. 102(e) as being anticipated by Parolari (US 20040081248 A1). The Office Action rejected claims 4, 6, 17, 19, 20, 28, 29 and 33 under 35 U.S.C. 103(a) as being unpatentable over Parolari as applied to claim 1 and further in view of Ramesh (US 6909758 B2). Applicants respectfully traverse the rejections made under 35 U.S.C. 102(b), 102(e), and 103(a).

The Office Action further rejected claims 1, 6, 7, 14, 27, 28, and 34 over co-pending application 10/791,945 under a provisional obvious-type double patenting rejection. With respect to these double-patenting rejections, Applicants will submit a Terminal Disclaimer at such time as is required to overcome the double-patenting rejection.

### **Claims 1 is not anticipated under 35 U.S.C. 102(b) by Pukkila**

Anticipation is established only if (1) all the elements of an invention, as stated in a patent claim, (2) are identically set forth, (3) in a single prior art reference. See, e.g., *Gechter v. Davidson*, 116 F.3d 1454, 1457, re USPQ2d 1030, 1032 (Fed. Cir. 1997) (“Under 35 U.S.C. § 102, every limitation of a claim must identically appear in a single prior art reference for it to anticipate the claim.”) Applicants respectfully assert that Pukkila does not identically disclose all elements of claim 1.

Independent claim 1 is directed to a “system for implementing Incremental Redundancy (IR) operations in a wireless receiver.” This system includes:

(1) a baseband processor that is operable to receive analog signals corresponding to a data block and to sample the analog signal to produce samples;

5 (2) an equalizer that is operable to receive the samples from the baseband processor, to equalize the samples, and to produce soft decision bits of the data block;

(3) a system processor that is operable to receive the soft decision bits and to initiate IR operations; and

(4) an IR processing module operably coupled to the system processor that is operable  
10 to receive the soft decision bits and to perform IR operations on the soft decision bits.

The Office Action equates block 203 of Pukkila (Ampl., A/D) with the baseband processor of claim 1. Block 203 of Pukkila is a combined amplifier and analog to digital converter. A combined amplifier and analog to digital converter is simply not equivalent to a baseband processor. A baseband processor, in addition to performing amplification and analog-to-digital conversion  
15 operations, is capable of performing significant other baseband processing operations, as is described in the specification of the present application. Thus, the combined amplifier and analog to digital converter of Pukkila block 203 does not equate to the baseband processor element of claim 1 and, for this reason, Pukkila does not anticipate claim 1.

The Office Action equates three elements of claim 1 with block 205' of Pukkila. Firstly, the  
20 Office Action equates the equalizer of claim 1 with block 205 (of block 205') of FIG. 2 of Pukkila. Secondly, the Office Action equates the system processor with block 205' of FIG. 2 (and operations of FIG. 3) of Pukkila. Thirdly, the Office Action equates the IR processing module with block 205' of FIG. 2 (and operations of FIG. 3) of Pukkila. Equating block 205' with multiple claim elements

is impermissible in making an anticipation rejection. Each teaching of a prior art reference can only be used to meet one claim element. Because block 205' is cited against multiple elements of claim 1, Pukkila does not anticipate claim 1.

Block 205' of FIG. 2 of Pukkila cannot be equated to either the system processor or the IR processing module of claim 1. As Pukkila describes at paragraph 25, last sentence, block 205' is a "turbo equalizer." Block 205' of FIG. 2 of Pukkila performs equalization, deinterleaving, decoding, and reinterleaving operations. Block 205' is not "a system processor that is operable to receive the soft decision bits and to initiate IR operations" as required by claim 1. Block 205' is not "an IR processing module operably coupled to the system processor that is operable to receive the soft decision bits and to perform IR operations on the soft decision bits." Thus, Pukkila does not disclose either the system processor or the IR processing module of claim 1. For this reason, Pukkila does not anticipate claim 1.

Pukkila further fails to describe the interaction among the elements of claim 1. FIG. 3 of Pukkila does not describe how any of blocks of FIG. 2 receives soft decision bits and initiates IR operations as does the system processor of claim 1. Pukkila does not describe how any of the blocks of FIG. 2 receives soft decision bits and performs IR operations on the soft decision bits as does the IR processing module of claim 1. For this reason, Pukkila does not anticipate claim 1.

In conclusion, Pukkila fails to anticipate claim 1 for any and all of the reasons provided above.

**Claims 14 is not anticipated under 35 U.S.C. 102(b) by Pukkila**

Independent claim 14 is directed to a "system for implementing Incremental Redundancy (IR) operations in a wireless receiver." This system includes:

- (1) at least one processing device that is operable to receive an analog signal

corresponding to a data block, to sample the analog signal to produce samples, to equalize the samples, to produce soft decision bits of the data block, and to initiate IR operations; and

(2) an IR processing module operably coupled to the at least one processing device that is operable to receive the soft decision bits and to perform IR operations on the soft decision bits.

5 As was the case with the rejection of claim 1, the Office Action equates multiple elements of independent claim 14 with block 205' of FIG. 2 (blocks 305-318 of FIG. 3 of Pukkila). Firstly, the Office action equates "at least one processing device" of claim 1 with block 205' of FIG. 2 and FIG. 3 blocks 305-318 of Pukkila. Secondly, the Office action equates "an IR processing module" of claim 1 with block 205' of FIG. 2 and FIG. 3 blocks 305-318 of Pukkila. Because block 205' is  
10 cited against multiple elements of claim 14, Pukkila does not anticipate claim 14.

Further, block 205' of FIG. 2 of Pukkila cannot be equated to either the IR processing module of claim 14. As Pukkila describes at paragraph 25, last sentence, block 205' is a "turbo equalizer." Block 205' of FIG. 2 of Pukkila performs equalization, deinterleaving, decoding, and reinterleaving operations. Block 205' is not "an IR processing module operably coupled to the at  
15 least one processing device to receive the soft decision bits and to perform IR operations on the soft decision bits" as claim 14 requires. Thus, Pukkila does not disclose the IR processing module of claim 14. For this reason, Pukkila does not anticipate claim 14.

Pukkila further fails to disclose a processing device that initiates IR operations. While Pukkila discloses a method for performing IR operations, it fails to describe what structure of FIG. 2  
20 could "initiate IR operations."

Thus, Pukkila fails to "identically set forth" all elements of claim 14 and, for this reason, Pukkila fails to anticipate independent claim 14.

**Claims 1-3, 5, 8-16, 21-27, 30-32, and 34 are not anticipated under 35 U.S.C. 102(e)**

**by Parolari**

The Office Action rejects claims 1-3, 5, 8-16, 18, 21-27, 30-32 and 34 under 35 U.S.C. 102(e) as being anticipated by Parolari (US 2004/0081248 A1, published April 29, 2004). In response to this rejection, Applicants point out that Parolari is not prior art under 35 U.S.C. 102(e). As stated in 35 U.S.C. 102(e), a reference is prior art when:

“the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.”

Parolari is a publication of application Ser. No. 10/680,122, filed October 8, 2003, which is a continuation of PCT/EP02/03881, filed April 8, 2002. Parolari does not state that PCT/EP02/03881 “was published under Article 21(2) of such treaty in the English language” as is required by 35 U.S.C. 102(e). The effective date of Parolari is therefore October 8, 2003. The present application has an effective filing date of December 9, 2002, based upon a priority claim to 60/431,940. This effective filing date of December 9, 2002 predates the October 8, 2003 filing date of Parolari. Thus, Parolari is not prior art under 35 U.S.C. 102(e) and therefore does not anticipate claims 1-3, 5, 8-16, 18, 21-27, 30-32 and 34 under such section.

**Claims 4, 6, 17, 19, 20, 28, 29 and 33 are not unpatentable under 35 U.S.C. 103(a)**  
**over Parolari as applied to claim 1 and further in view of Ramesh**

Parolari is not prior art to the present application for the reasons stated above.  
Because Parolari is not prior art to the present application, the 35 U.S.C. 103(a) rejections of  
5 claims 4, 6, 17, 19, 20, 28, 29, and 33 are improper and should be withdrawn.

All claims are now allowable and a notice of allowance is courteously solicited. Please  
direct any questions or comments to the undersigned attorney at the address indicated.

Respectfully submitted,

Date: November 23, 2005

By: /Bruce E. Garlick/  
Bruce E. Garlick, Reg. 36,520

**Garlick, Harrison & Markison, LLP**  
P.O. Box 160727  
Austin, Texas 78716-0727  
(512) 264-8816  
(512) 264-3735 fax